

REMARKS

In the present application, claims 1, 2, 61, 65-76, 79-87, 90-98, and 101-104 were pending and stand rejected in the Non-final Office Action mailed January 10, 2008. In this response, claims 61, 74 and 76 are cancelled in addition to the previously cancelled claims. Claims 1, 2, 66, 73, 75, 79, 80, 86, 87, 90, 91, 97, 98, 101 and 102 are amended. Reconsideration of the present application as amended and including claims 1, 2, 65-73, 75, 79-87, 90-98, and 101-104 is respectfully requested.

The Information Disclosure Statement filed on November 26, 2007 was objected to for failing to enclose copies of the foreign references. Submitted herewith is a copy of WO 94/17759 cited in the November 26 IDS along with the fee for consideration of the same. The other foreign reference cited in the November 26 IDS is listed among the references cited by the examiner in the January 10, 2008 Office Action, and therefore has not be re-cited herewith.

Claims 2, 79 and 90 were rejected under 35 USC §112, second paragraph as being indefinite since "said outer wall" in the claims lacked antecedent basis. Claims 2 and 90 are amended to recite "said outer surface" to maintain consistency with claims 1 and 87, respectively. Claims 75 and 79 have been amended to recite "outer surface" rather than outer wall. Claim 101 has also been amended along these lines to provide consistency with claim 98. Withdrawal of this rejection of claims 2, 79 and 90 is respectfully requested.

Independent claims 1, 75, 87 and 98 are amended in this response. Support for the amendments may be found in the original claims, Figures 17-18, and page 29, line 32-page 30, line 22 and page 31, lines 16-20. The amendments to the remaining claims are provided to maintain consistency with the amendments to claims 1, 75, 87 and 98.

Claims 1, 2, 66-68 and 72-73 stand rejected under 35 USC §102(e) as anticipated by U.S. Patent No. 6,015,937 to Branemark. Applicants reserve the right to swear behind Branemark in this application or in any continuing application with an affidavit under 37 CFR §1.131.

Assuming *arguendo* that Branemark is citable in the present application as a reference, Branemark discloses an anchor screw 1 with an axial bore 8 and a longitudinal slot or recess 5a. A blanking element 6a is releasably secured in recess 5a and closes recess 5a as anchor screw 1 is screwed into a bore prepared in bony tissue. Blanking element 6a “easily removed to prepare the anchoring element for coupling with a prosthesis component....” See col. 5, lines 11-21. Blanking element 6a is configured to “occupy the entire slot, and, for example, should be of the same length as slot 5, thereby efficiently preventing tissue from growing into the slot during the healing period of the anchor element.” See col. 5, lines 63-67.

In contrast, amended claim 1 recites, among other features, “said occlusion body further including at least one aperture between said inner and outer surfaces sized to permit bone ingrowth through said occlusion body....” Branemark does not disclose such a feature for blank 6a. Furthermore, Branemark teaches away from modifying blank 6a to include these features since bone ingrowth would prevent removal of blank 6a and also result in obstruction of bore 8, rendering anchor screw 1 inoperable for attachment of a prosthesis component. Therefore, one of ordinary skill in the art would have no rational reason to modify blank 6a to provide apertures for bone ingrowth since Branemark teaches preventing bone ingrowth with blank 6a. Therefore, withdrawal of this basis of the rejection of claim 1 is respectfully requested.

Claims 2, 66-68 and 72-73 depend directly or indirectly from claim 1 and are allowable at least for the reasons claim 1 is allowable and for other reasons. For example, amended claim 2 recites “further comprising a flange in communication with and connected with said outer surface, said flange projecting around said engaging surface of said occlusion body.” Branemark fails to disclose a flange projecting around an engaging surface of blank 6a. Withdrawal of this basis of the rejection of these claims is respectfully requested.

Claims 1, 2, 66-69, 73, 74, 87, 90-94 and 96 stand rejected under 35 USC §102(e) as anticipated by U.S. Patent No. 5,766,250 to Chervitz et al. Applicants reserve the right to swear behind Chervitz in this application or in any continuing application with an affidavit under 37 CFR §1.131.

Assuming *arguendo* that Chervitz is citable in the present application as a reference, Chervitz fails to disclose or suggest “an occlusion body sized and shaped for blocking the opening, said occlusion body including an outer surface, an inner surface, and an engaging surface extending from said inner surface toward said outer surface, said engaging surface configured to contact an inner surface of the fusion device around the opening ... and a pair of elongated anchors projecting from said inner surface of said occlusion body on opposite sides of said occlusion body, each of said anchors including a first end attached to said inner surface of said occlusion body at said engaging surface...” as recited in amended claim 1.

Chervitz discloses a male member 11 for mounting to a threaded footing 13 to secure a ligament graft 41 to bone structure. Male member 11 includes a cone shaped tip 19 that is positioned in footing 13, a mounting plate 27 that extends outwardly from the footing 13 for engagement with bone end 40 of a ligament graft 41, and a disk 26 between footing 13 and mounting plate 27. Posts 30a and 30b project from an upper surface 29 of mounting plate 27 and are received in holes in bone end 40. However, post 30a is not attached to mounting plate 27 at end 27a. Furthermore, post 30a could not be attached at end 27a since disc 26 is attached at end 27a to provide a platform from which tip 19 extends. If disc 26 and tip 19 were eliminated to accommodate a second post at end 27a, then male member 11 could not be attached to footing 13, rendering the device in Chervitz inoperable and unsuited for its intended purposes. Therefore, Chervitz teaches away from arrangement of elements recited in claim 1, and withdrawal of the rejection of claim 1 is respectfully requested.

Amended claim 87 recites, among other features, “an occlusion body sized including an outer surface, an opposite inner surface, and an engaging surface extending from said inner surface toward said outer surface with said occlusion body sized and shaped for blocking the opening ... and a pair of elongate anchors projecting from said inner surface and extending transversely to said occlusion body on opposite sides of said occlusion body, each of said anchors including a first end attached to said inner surface of said occlusion body at said engaging surface and an opposite second end....” As discussed above with respect to claim 1, Chervitz fails to disclose or suggest these

features. Therefore, withdrawal of this basis of the rejection of claim 87 is respectfully requested.

Claims 2, 66-69, 73 and 74 depend directly or indirectly from claim 1, and claims 90-94 and 96 depend directly or indirectly from claim 87. These claims are allowable at least for the reasons their respective base claims are allowable and for other reasons. For example, claims 2 and 90 recite “further comprising a flange in communication with and connected with said outer surface, said flange projecting around said engaging surface of said occlusion body.” Chervitz fails to disclose a flange projecting around an engaging surface of the mounting plate 27. Withdrawal of this basis of the rejection of these claims is respectfully requested.

Claim 61 stand rejected under 35 USC §103(a) as being unpatentable over Branemark or Chervitz in view of U.S. Patent No. 5,702,451 to Biedermann et al. or WO 91/06261 to Ray. Claim 61 is cancelled in this response.

Claims 65, 75, 79-81 and 86 stand rejected under 35 USC §103(a) as being unpatentable over Branemark in view of Biedermann or Ray. Amended claim 75 recites, among other features, “said occlusion body further including at least one aperture between said inner and outer surfaces sized to permit bone ingrowth through said occlusion body....” As discussed above with respect to claim 1, Branemark teaches away from modifying blank 6a to include these features since bone ingrowth would prevent removal of blank 6a from anchor screw 1 and also result in obstruction of bore 8, rendering anchor screw 1 in operable for attachment of a prosthesis component. Therefore, one of ordinary skill in the art would have no rational reason to modify blank 6a to provide apertures for bone ingrowth since Branemark teaches preventing bone ingrowth with blank 6a. Therefore, withdrawal of this basis of the rejection of claim 1 is respectfully requested.

Claim 65 depends from claim 1, and claims 79-81 and 86 depend from claim 75. These claims are allowable at least for the reasons their respective base claims are allowable. Withdrawal of this basis of the rejection of claims 65, 79-81 and 86 is respectfully requested.

Claims 75, 79-83 and 97 stand rejected under 35 USC §103(a) as being unpatentable over Chervitz in view of Biedermann or Ray. Claim 75 has been amended and recites “an occlusion body sized and shaped for blocking the opening, said occlusion body including a flat outer surface lying in a plane, an inner surface opposite said outer surface, and an engaging surface extending from said inner surface toward said outer surface, said engaging surface configured to contact an inner surface of the fusion device around the opening ... and a pair of elongate anchors projecting from said inner surface of said occlusion body in a direction transverse to the plane on opposite sides of said occlusion body, each of said anchors including a first end attached to said inner surface of said occlusion body at said engaging surface and an opposite second end....” As discussed above with respect to claim 1, Chervitz fails to disclose or suggest post 30a attached to an inner surface of mounting plate 27 at end 27a. Furthermore, Chervitz teaches away from attaching post 30a at end 27a since disc 26 is attached at end 27a to provide a platform from which tip 19 extends to be inserted into footing 13. If disc 26 and tip 19 were eliminated to accommodate a second post at end 27a, then male member 11 could not be attached to footing 13, rendering the device in Chervitz inoperable and unsuited for its intended purposes.

Furthermore, one of ordinary skill in the art would have no reason to make undersurface 28 flat. Undersurface 28 is convexly rounded to match the outer profile of foot 13 so that during positioning in the bone tunnel drilled for foot 13 undersurface 28 conforms to the shape of the tunnel. A flat undersurface 28 would hinder guidance of male member 11 by the bone tunnel, and further would result in a mismatched shape with the adjacent bone surface. Therefore, Chervitz teaches away from the modifications proposed in the office action to modify undersurface 28 to be flat, and a review of Biedermann and Ray did not reveal any reasoning as to why one of ordinary skill in the art would have any reason modify Chervitz as such. Therefore, one of ordinary skill in the art would have no rational reason to modify Chervitz in accordance with either Biedermann or Ray to arrive at the arrangement of elements recited in claim 75, and withdrawal of the rejection of claim 75 is respectfully requested.

Claims 79-83 depend from claim 75 and are allowable at least for the reasons claim 75 is allowable. Furthermore, claim 79 is allowable for the same reasons claims 2 and 90 are allowable. Withdrawal of this basis of the rejection of these claims is respectfully requested. Claim 97 depends from claim 87 which is allowable for the reasons provided above. Withdrawal of this basis of the rejection of claim 97 is respectfully requested.

Claims 70 and 71 stand rejected under 35 USC §103(a) as being unpatentable over Branemark or Chervitz in view of U.S. Patent No. 6,605,089 to Michelson. Claims 70-71 depend directly or indirectly from claim 1, and are allowable at least for the reasons claim 1 is allowable. Withdrawal of this basis of the rejection of claims 70 and 71 is respectfully requested.

Claims 76, 84 and 85 stand rejected under 35 USC §103(a) as being unpatentable over Branemark, Biedermann and Ray as applied to claim 65 and further in view of Michelson. Claims 76, 84 and 85 depend directly or indirectly from claim 75, and are allowable at least for the reasons claim 75 is allowable. Withdrawal of this basis of the rejection of these claims is respectfully requested.

Claims 95, 98, 101, 102 and 103 stand rejected under 35 USC §103(a) as being unpatentable over Chervitz in view of Michelson. Amended claim 98 recites, among other features, an occlusion body sized and shaped for blocking the opening, said occlusion body being composed of a porous material and including an outer surface, an inner surface opposite said outer surface, and an engaging surface extending from said inner surface toward said outer surface, said engaging surface configured to contact an inner surface of the fusion device around the opening; and a pair of elongate anchors projecting from said inner surface and extending transversely to said occlusion body on opposite sides of said occlusion body, each of said anchors including a first end attached to said inner surface of said occlusion body at said engaging surface and an opposite second end, each of said anchors having a length which extends axially from said occlusion body to the second end....” As discussed above with respect to claims 1 and 75, Chervitz fails to disclose or suggest post 30a attached to an inner surface of mounting plate 27 at end 27a. Furthermore, Chervitz teaches away from attaching post 30a at end

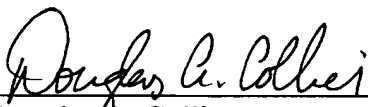
27a since disc 26 is attached at end 27a to provide a platform from which tip 19 extends to be inserted into footing 13. If disc 26 and tip 19 were eliminated to accommodate a second post at end 27a, then male member 11 could not be attached to footing 13, rendering the device in Chervitz inoperable and unsuited for its intended purposes. Therefore, one of ordinary skill in the art would have no rational reason to modify Chervitz in view of Michelson to arrive at the arrangement of elements recited in claim 98, and withdrawal of the rejection of claim 98 is respectfully requested.

Claim 95 depends from claim 87, and claims 101-103 depend directly or indirectly from claim 98. These claims are allowable at least for the reasons their respective base claims are allowable. Withdrawal of this basis of the rejection of these claims is respectfully requested.

Claim 104 stands rejected under 35 USC §103(a) as being unpatentable over Chervitz and Michelson, and further in view of Branemark. Claim 104 depends indirectly from claim 98, and is allowable at least for the reasons claim 98 is allowable. Withdrawal of this basis of the rejection of claim 104 is respectfully requested.

Reconsideration and allowance of the present application including claims 1, 2, 65-73, 75, 79-87, 90-98, and 101-104 is hereby respectfully solicited. The Examiner is welcome to contact the undersigned to resolve any outstanding issue with regard to the present application.

Respectfully submitted

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